

Remarks

In the final office action mailed May 13, 2003, the Examiner rejected claims 1, 2, 5, 6 and 10-15 under 35 U.S.C. § 103(a) as being unpatentable over admitted prior art (hereinafter APA) in view of FR 2711573A to Dubois (hereinafter Dubois), JP 07081628A to Yoshinori (hereinafter Yoshinori), and optionally DE 4442767A1 to Ilzhöfer, et al. (hereinafter Ilzhöfer). The Examiner rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over APA, Dubois, Yoshinori and optionally Ilzhöfer, and in further view of U.S. Patent No. 3,786,708 to Mumper. The Examiner rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over APA, Dubois, Yoshinori and optionally Ilzhöfer, and in further view of U.S. Patent No. 1,491,134 to Northall. The Examiner rejected claims 16 and 17 under 35 U.S.C. § 103(a) as being unpatentable over APA, Dubois, Yoshinori and optionally Ilzhöfer, and in further view of GB 2061871A to Corner. Claims 7-9 are withdrawn. By this amendment, Applicants' representative amends claims 1 and 15, and adds new claims 18-23. Support for the amendment to claims 1 and 15 can be found, for example, in Figs. 1 and 2, and in the specification on page 6, l. 35 through page 7, l. 2. Support for new claims 18 and 19 can be found, for example, in the specification on page 3, ll. 10-13. Support for new claims 20-23 can be found in Figures 1 and 2 and in the specification on page 6, ll. 8-34. As such, no new matter has been added.

With respect to the Examiner's rejections, the Examiner is invited to consider the following remarks.

Amended claim 1 provides for a method of making a composite panel of sandwich structure and provided with a hinge, the method being characterized in that, after the panel has been formed, forming a hinge between two portions of the panel at a predetermined place in the panel by cutting only a narrow incision relative to the thickness of the panel through one of first and second skins, and substantially through the entire thickness of a cellular core, while leaving the other skin intact. Claim 15 provides similar recitations. The cited art, alone or in combination, fails to provide the features of presently pending claims 1 and 15.

The Examiner asserts that a 4 mm wide hinge as disclosed by Yoshinori is only as an example and that one having ordinary skill in the art would appreciate that the incision can be smaller. To the contrary, however, Yoshinori discloses a structure having a total thickness in a range of 7-8 mm (i.e., honeycomb 22 is 5 mm, material 27 and 28 are 0.5-1 mm and layer 24 is 1 mm). If the width A is made to 4 mm or above, one part of the floor covering material 10 is bendable in a range of 180 - 30° and the durability of the bending is over 500 times at -30°C. (See, for example, Yoshinori at Fig. 3 and human translation, para. 0015). As such, Yoshinori, in fact, teaches away from an incision more narrow than 4 mm. None of the cited references, alone or in combination, provides the presently claimed invention.

Furthermore, the serrated blade used to make the narrow incision 104 of the present invention has a thickness of 0.5 mm. (See, specification, page 8, ll. 8-9). In contrast and contrary to the Examiner's assertion that the incision taught by Yoshinori can be smaller than 4 mm, Yoshinori discloses the integral hinge (30) has a width (A) that is 4 mm or more. (See, human translation of Yoshinori, para. 0015). As such, Yoshinori fails to disclose, teach or suggest forming a hinge between two portions of the panel by cutting only a narrow incision relative to the thickness of the panel and, in fact, teaches away from a narrow incision.

Regarding the claims which depend from claims 1 and 15, Applicants contend that these claims are patentable for at least the same reasons that claims 1 and 15 are patentable. Moreover, Applicants contend these claims recite further limitations, in addition to the limitations of claims 1 and 15, which render these claims additionally patentable.

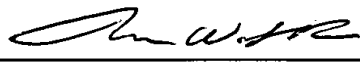
New claims 20 and 21 provide a sandwich structure consisting of a stack made up of three layers, wherein said three layers include a first skin made of a reinforced thermoplastic material, a cellular core made of a thermoplastics material, and a second skin made of a reinforced thermoplastics material. The cited art, alone or in combination, fails to provide the features of presently pending claims 20 and 21.

New claims 22 and 23 concern forming a hinge between two portions of a sandwich panel at a predetermined place in said panel by cutting only a narrow incision relative to the thickness of the panel through one of first and second skins, and substantially through the entire thickness of a cellular core, while leaving the other skin intact, and the hinge consists of only the intact skin adjacent the core. The cited art, alone or in combination, fails to provide the features of presently pending claims 22 and 23.

Consequently, in view of these remarks, Applicants respectfully contend that the rejections have been fully replied to and traversed, and that the application is in condition for allowance, and the Examiner is respectfully requested to pass this case to issue. A check in the amount of \$1112 is enclosed to cover the Request for Continued Examination fee of \$750, the \$252 fee for three independent claims over three, and the one month extension fee of \$110. Please charge any additional fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978 -- a duplicate of this paper is enclosed for that purpose.

The Examiner is respectfully requested to telephone the undersigned to discuss prompt resolution of any remaining issues necessary to place this case in condition for allowance.

Respectfully submitted,
Nicholas Hochet, et al.

By 
Thomas W. Saur
Reg. No. 45,075
Attorney/Agent for Applicant

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BROOKS KUSHMAN P.C.
1000 Town Center, 22nd Floor
Southfield, MI 48075-1238
Phone: 248-358-4400
Fax: 248-358-3351